

The opinion in support of the decision being entered today  
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* JAMES D. CLIVER  
SCOTT LOVINGOOD,  
F. JEFFERY MOORE, and  
DALE R. WILLIAMS

---

Appeal 2007-3955  
Application 09/756,956  
Technology Center 1700

---

Decided: September 24, 2007

---

Before BRADLEY R. GARRIS, CHUNG K. PAK, and  
JEFFREY T. SMITH, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from a final rejection of  
claims 1-42. We have jurisdiction under 35 U.S.C. § 6.  
WE AFFIRM.

Claim 1 is illustrative:

1. A process for manufacturing patterned fabrics comprising the steps of:

applying a water soluble chemical substance designed to physically inhibit wetting to selected regions of a fabric to define treated and untreated regions forming a pattern, wherein the treated regions to which the chemical substance is applied are characterized by reduced watability relative to the untreated regions; and

exposing substantially the entire fabric to an aqueous dye liquor until said untreated regions are saturated while said treated regions are less than fully saturated, to thereby form a patterned fabric.

The Examiner relies upon the following references:

Thomas	US 4,131,422	Dec. 26, 1978
Moore	US 5,984,977	Nov. 16, 1999
Kanzig	WO 99/67459	Dec. 29, 1999

Appealed claims 1-42 stand rejected as unpatentable as follows:

- (i) claims 1-9, 14, 16-22, 25-39 and 41-42 are rejected under 35 U.S.C. § 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Kanzig ;
- (ii) claims 1-42 are rejected under 35 U.S.C. § 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Thomas; and
- (iii) claims 1, 3, 4, 7, 9, 14, 17, 19-20, 22, 30, 31, 33-34, 36-38 and 42 rejected under 35 U.S.C. § 103(a) as obvious over Moore.

We have thoroughly reviewed each of Appellants' arguments for patentability. However, we are in full agreement with the Examiner that the claimed subject matter is unpatentable over the cited prior art. Accordingly,

we will sustain each of the Examiner's rejections for the reasons set forth in the present record. We add the following.<sup>1</sup>

Appellants' claimed invention is directed to a process for manufacturing patterned fabrics. The claimed process involves applying a water soluble chemical substance to selected regions of a fabric according to a pattern. The chemical substance preferably includes a print paste comprising a thickening agent and water (Specification 10). The treated regions are characterized as having reduced surface wettability for a period of time greater than the fabric is in contact with the aqueous dye liquor (Specification 9). In some embodiments, the chemical substance may include a dye so as to be colored differently from the surrounding regions of the base fabric (Specification 11). The chemical substance is preferably dried prior to subsequent treatment with the dye liquor (Specification 12). Subsequently, dye liquor is exposed, continuously or semi-continuously, to the entire fabric until untreated regions are saturated while treated regions are less than fully saturated to thereby form a patterned fabric (Specification 12).

#### The Rejection over Kanzig

The Examiner determined that Kanzig teaches and suggests a printing process for fabrics that comprises the application of a printing paste to

---

<sup>1</sup> Appellants have not presented arguments directed to all the rejected claims. We select claim 1 as representative of the rejected claims. We will also address the Appellants' arguments directed to specific claims.

specific areas of a fabric followed by dyeing the entire fabric (Answer 3-5). Kanzig discloses that a printing paste can comprise thickeners (Kanzig 6). Kanzig discloses the printing paste can be dried before subsequent treatment (Kanzig 8).

Appellants argue that the exemplified printing paste of Kanzig comprises ethylene oxide with castor oil. Appellant contends that these components are understood to be wetting agents. Thus, Appellants contend that the printing paste of Kanzig increases the wettability of the substrate fabric (Br. 6-8).

Appellants' arguments are not persuasive. As pointed out by the Examiner, Answer 9, Kanzig exemplifies embodiments that do not include ethylene oxide with castor oil. Further, Kanzig discloses the printing paste is applied to the fabric and dried prior to subsequent treatment. Since the printing paste of Kanzig is dried prior to subsequent treatment and comprises similar components to those utilized in the claimed chemical substance, it is reasonable to believe that the treated area would have some reduced wettability compared to the remaining portions of the fabric. Appellants have not directed us to evidence that establishes the treated and dried portions of Kanzig do not possess some reduced wettability.

#### The Rejection over Thomas

The Examiner determined that Thomas teaches and suggests a printing process for fabrics that comprises the application of a water soluble acid dyeable polymer (printing paste) to specific areas of a fabric followed

by dyeing the entire fabric (Answer 6-7). Thomas discloses the water soluble acid dyeable polymer that can comprise thickeners (Thomas, col. 5, ll. 4-35). Thomas discloses the dyeable polymer can be dried before subsequent treatment (Thomas, col. 6, ll. 55-65).

Appellants' principal argument is that, "[i]nstead of retarding dyeing by inhibition of wetting, it appears that Thomas discloses application of a polymer which enhances dyeing of the areas to which the polymer has been applied." (emphasis omitted) (Br. 9).

Appellants' argument is not persuasive. The claimed invention does not preclude the areas that have been treated from having an enhanced dyeability. In fact, as stated above, the Specification discloses that the treated portion may be treated so as to be colored differently from the surrounding area. Further, Thomas discloses the dyeable polymer is applied to the fabric and dried prior to subsequent treatment. Since the dyeable polymer of Thomas is dried prior to subsequent treatment and comprises similar components to those utilized in the claimed chemical substance, it is reasonable to believe that the treated area of the fabric would have some reduced wetability compared to the remaining portions of the fabric. Appellants have not directed us to evidence that establishes the treated and dried portions of Thomas do not possess some reduced wetability.

#### The Rejection over Moore

The Examiner determined that Moore would have suggested to a person of ordinary skill in the art a printing process for fabrics that

comprises the application of a printing paste to specific areas of the fabric followed by dyeing the entire fabric (Answer 8-9).

Appellants' principal argument is that the printing paste of Moore comprises wetting agents therefore the printing paste would not physically inhibit wetting of the fabric as required by claims 1, 22 and 38. Appellants further contend that "[w]hile Moore may result in reduced shading in treated areas, that reduction does not appear to correspond with a reduction in wetability of the fabric as presently claim." (Br. 11).

Appellants' arguments are not persuasive. As pointed out by the Examiner, Moore discloses an aspect of the invention where the printing paste can comprise a thickener and a dye blocking agent without a wetting agent (Answer 11). Since the printing paste of Moore is dried prior to subsequent treatment and comprises similar components to those utilized in the claimed chemical substance, it is reasonable to believe that the treated area of the fabric would have some reduced wetability compared to the remaining portions of the fabric. Appellants have not directed us to evidence that establishes the treated and dried portions of Moore do not possess some reduced wetability.

In conclusion, based on the foregoing and the reasons well stated by the Examiner, the Examiner's decision rejecting the appealed claims 1-42 is affirmed.

Appeal 2007-3955  
Application 09/756,956

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

tf/lb

Legal Department (M-495)  
P.O. Box 1926  
Spartanburg, SC 29304